

agent and an alkaline earth metal detergent. The Office Action indicates that the phosphorus extreme pressure compound may be a phosphite and the alkaline earth metal detergent may be a salt of a carboxylic acylating agent, such as a salicylate. The Office Action has indicated that the composition of Ichihashi et al meets the claim limitation directed to the ratio of equivalents because the equivalents of the overbased material and the equivalents of phosphite is such that the ratio of overbased material to phosphite is at least one. The Office Action then concludes that Ichihashi et al anticipate Applicant's claims.

Applicant's claims are directed to lubricating compositions which contain a basic metal salt of an carboxylic acylating agent and a hydrocarbyl phosphite of a specific formula. The lubricating composition additionally is free of metal deactivators and the ratio of the basic metal salt, based on total base number, to the equivalents of hydrocarbyl phosphite, based on phosphorus atoms, is at least one.

Ichihashi et al teach a lubricant composition for a continuous variable transmission which comprises a base oil and a sulfurized extreme pressure additive (A), a phosphorus-based extreme pressure additive (B) and an alkaline earth metal-base detergent (C). Ichihashi et al teach that this lubricant is particularly suitable for a transmission having a metal belt type. Ichihashi et al teach that the benefits of the combination of ingredients is wear resistance and extreme pressure protection. The ingredients also have the ability to keep the coefficient of friction high for a long period of time while transmitting a large amount of torque.

At column 2, lines 7-20, Ichihashi et al teach a preference for sulfur based extreme pressure additives that are selected from sulfurized oils and fats, thiocarbamates and thioterpenes. The preferred phosphorus based extreme pressure additives are tricresyl phosphate and amine salts of alkyl or alkenyl acid phosphate esters. The preferred alkaline earth metal based detergent is calcium phenates.

Ichihashi et al teach that the phosphorus based extreme pressure additives may include phosphate esters, acid phosphate esters, phosphite esters, acid phosphite esters, thiophosphate esters, acid thiophosphate esters, amine salts thereof, and phosphosulfurized terpenes, such as those made by the reaction of pinene and

phosphorus pentasulfide. Ichihashi et al teach that the alkaline earth metal detergents include alkaline earth metal sulfonates, phenates, salicylates and phosphates.

Ichihashi et al contain three examples of specific formulations for continuous variable transmissions. The examples are summarized in the table below.

Table 1

<u>Example</u>	<u>Phosphorous Additive</u>	<u>Detergent</u>
1	Tricresyl phosphate	Calcium phenate
2	Acid phosphate ester amine	Calcium phenate
3	Acid phosphate ester amine	Calcium sulfonate

Zinc dithiophosphate is present in Example 3 of Ichihashi et al. Ichihashi et al do not teach that zinc dithiophosphates are a phosphorus based extreme pressure additive component (B) of the continuous variable transmission lubricants.

Ichihashi et al also contain four comparative examples. The four comparative examples are summarized below.

Table 2

<u>Comparative Example</u>	<u>Phosphorous Additive</u>	<u>Detergent</u>
1	Tricresyl phosphate	—
2	—	Calcium phenate
3	Tricresyl phosphate	Calcium sulfonate
4	—	—

Comparative Example No. 4 contains a zinc dithiophosphate. Ichihashi et al do not teach that the zinc dithiophosphate is a phosphorus based extreme pressure additive component (B) of the continuous variable transmission lubricants.

The present claims stand rejected under 35 USC §102(b). Applicant notes that Ichihashi et al issued on August 11, 1998. Applicant's priority date for its provisional application is November 3, 1998. Accordingly, Applicant submits that the proper basis of rejection should be 35 USC §102(e).

Applicant submits that the Examiner has failed to establish a *prima facie* case of anticipation in the present application. As is well settled,

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)

Applicant submits the Examiner has failed to establish that Ichihashi et al teach each and every element of the present claims. Applicant submits that Ichihashi et al do not teach or suggest the combination of a basic metal salt of a carboxylic acylating agent and a hydrocarbyl phosphite. Applicant acknowledges that although Ichihashi et al teach that a phosphite might be used as a phosphorus extreme pressure additive, there is no example or teaching in Ichihashi et al which would lead one to use a combination of a phosphite and a basic metal salt of a carboxylic acylating agent. Neither of Applicant's claimed additives are preferred items of Ichihashi et al. Ichihashi et al fail to even provide a combination of additives with either of Applicant's claimed components.

Additionally, Applicant submits that Ichihashi et al do not teach or suggest the claimed limitation that the ratio of equivalents of basic metal salt, based on the total base number, to the equivalents of hydrocarbyl phosphite, based on the phosphorus atoms, is at least one. Applicant submits that this claimed ratio is not taught by Ichihashi et al either expressly or inherently. As is well settled

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)

Ichihashi et al do not teach the combination of the specific components of Applicant's claims, namely the combination of a basic metal salt of a carboxylic acylating agent and a hydrocarbyl phosphite. Additionally, Ichihashi et al do not teach or suggest the ratio required by Applicant's claims. There is no disclosure within Ichihashi et al which lead one skilled in the art to the ratio required by Applicant's claims. Applicant submits that the Office Action has failed to establish that the ratio required by Applicant's claims necessarily results from the teachings of Ichihashi et al.

In view of the above comments, Applicant submits that their claims are not anticipated by Ichihashi et al.

Applicant also submits that the Office Action has not established a *prima facie* case of obviousness. As is well known

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (MPEP §2143)

The Office Action has indicated that Ichihashi et al must be modified by replacing the preferred phosphorus based extreme pressure additive, such as tricresyl phosphate and amine salts of alkyl or alkenyl acid phosphate esters, with a phosphite. Also, the preferred detergent calcium phenate would have to be replaced with a basic metal salt of a carboxylic acylating agent. There is no teaching or suggestion within Ichihashi et al which would lead one to the combination of the phosphite and basic metal salt of a carboxylic acylating agent as has been suggested by the Office Action. Applicant submits that there is no suggestion or motivation within Ichihashi et al to use a combination of a phosphite and metal salt of a carboxylic acylating agent.

Ichihashi et al teach towards using tricresyl phosphate and an acid phosphate ester amine for the phosphorus extreme pressure additive. Ichihashi et al specifically motivates a person skilled in the art to use calcium phenate and secondarily calcium sulfonate. Ichihashi et al teach that calcium phenate is more desirable because of its ability to improve the coefficient of friction (column 5, lines 10-13). Ichihashi et al had previously indicated that the coefficient of friction must be maintained in order to transfer torque in the continuous variable transmission.

In view of the above comments, Applicant submits that there is no teaching or suggestion within Ichihashi et al that would lead one of ordinary skill in the art to replace the preferred materials of Ichihashi et al with a phosphite or a metal base salt of a carboxylic acylating agent. Since Ichihashi et al lack the teaching or suggestion of the

Applicant's claimed lubricating composition, Applicant submits that Ichihashi et al do not render their claims obvious.

In the event any issues remain in the prosecution of this application, Applicant requests the Examiner call the undersigned attorney to expedite allowance of the claims. If any fees are required for the filing of these papers, Applicant requests the Commissioner to charge those fees to Deposit Account #18-0988.

Respectfully submitted,

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